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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,556	03/23/2004	Sarah Jane Mears	EL0508USNA	2562

23906	7590	01/18/2008
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EXAMINER
KOPEC, MARK T

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
01/18/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

Office Action Summary

Application No.

10/806,556

Applicant(s)

MEARS, SARAH JANE

Examiner

Mark Kopec

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This action is responsive to applicant's amendment/remarks filed 10/31/07. Claims 1-16 are currently pending with claims 4 and 5 withdrawn from consideration.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2, 3, and 11-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Okamoto et al (5,616,173), Carroll et al (5,162,062) or Oba et al (5,670,089).

This rejection is maintained for the reasons set forth in the Rejection mailed 08/26/05 (Pages 4-7).

Claims 1 and 6-10 are rejected under 35 U.S.C. 102(b) as anticipated by Chacko et al (6,228,288).

This rejection is maintained for the reasons set forth in the Rejection mailed 05/231/07 (Pages 4-5).

Claims 1 and 6-10 are rejected under 35 U.S.C. 102(b) as anticipated by JP 2000-285731.

This rejection is maintained for the reasons set forth in the Rejection mailed 05/231/07 (Pages 5-6).

Claims 2, 3, and 11-16 are rejected under 35 U.S.C. 102(b) as anticipated by JP 11-120821.

It is noted that applicant has not argued the merits of this rejection in the reply filed 10/31/07.

This rejection is maintained for the reasons set forth in the Rejection mailed 05/23/07 (Page 6).

Applicant's arguments filed 10/31/07 have been fully considered but they are not persuasive.

Initially, note that independent claim 1 (and claims dependent thereon) are not rejected over Okamoto et al (5,616,173), Carroll et al (5,162,062) or Oba et al (5,670,089). Accordingly, applicant's remarks regarding these rejections and the instant "consisting of" claims have not been addressed.

With respect to instant claims 2-3 and 11-16, the examiner respectfully maintains that Okamoto, Carroll and Oba meet the claimed limitations. Specifically, a careful examination of Okamoto discloses inorganic binder within the claimed range. Each of the compositions disclosed in Table 1 meet the claimed limitations (0.80% glass total, i.e. 0.98 wt% glass with respect to solids). With respect to Carroll, the examples disclosed in Table 5, which contain frit/Ag in ratios from 0.016-0.026, meet each of **the claimed limitations**. Furthermore, the fact that Carroll teaches the presence of additional components such as sintering inhibitor, or teaches utility a multilayer circuit,

does not make the disclosure inapplicable to the instant claims. With respect to Oba, applicant argues, "The present invention, when inorganic binder is included, does not require a PbO containing frit. The examiner respectfully maintains that such binders are not excluded from the above listed instant claims. In fact, the recited Markush group includes several lead containing frits.

The references specifically or inherently meet all claimed limitations.

With respect to the rejection of instant claims 1 and 6-10, applicant argues that the instant claims lack the optional 0-10 wt% cyanate ester resin or the 3-20 wt% polyamine resin. The examiner does not dispute that Chacko discloses such components. However, as stated in the rejection, the examiner submits that the disclosure (of Chacko) meets the instant requirements of "consisting of" electrically conductive material and liquid vehicle and/or "wherein the composition does not contain an inorganic binder". Specifically, the instant recitation of "liquid vehicle" in claim 1 is construed to include some amount of binder/stabilizing agent in addition to solvent. This appears consistent with applicant's disclosure of "organic medium" at pages 7-8 of the instant specification.

With respect to JP 2000-285731, applicant states that the problem solved by the invention is different from the reference (page 8 of response), and accordingly JP '731 does not anticipate or make obvious the embodiments that include glass frit. The examiner notes that instant claims requiring glass are not rejected over this reference.

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/Mark Kopec/
Primary Examiner
Art Unit 1796

MK
January 15, 2008